

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Marked up replacement paragraphs:

Page 5 paragraph 1.

Polypeptides in which alanine has been substituted in place of each of the amino acids having a charged side chain, SEQ NOs:34, 35, 36, 37 and 38, were found to lack or to exhibit substantially less bone stimulatory activity than the family of compounds in which the full general charge pattern and spacing was retained. On the other hand, sequences in which the second, third, sixth and seventh amino acids were substituted by alanine (or glycine in the case of the seventh amino acid, which is alanine in the parent sequence, SEQ ID NO:9), SEQ ID NOs:39, 40, 41 and 42, (encoded by SEQ ID NOs:55, 56, 57 and 58, respectively) largely retain bone stimulatory activity.

Page 5 paragraph 2.

A polypeptide in which the ninth amino acid, cysteine, has been replaced by tyrosine (SEQ ID NO:43, coding SEQ ID NO:59) was found to have some bone stimulatory activity.

Page 5 paragraph 3.

A polypeptide in which the third amino acid, asparagine, has been replaced by glutamine, the eighth amino acid, aspartic acid, has been replaced by glutamic acid, and the ninth amino acid, cysteine, has been replaced by alanine (SEQ ID NO:44, coding SEQ ID NO:60) was found to have bone stimulatory activity.

Page 5 paragraph 4.

A polypeptide in which the third amino acid, asparagine, has been replaced by glutamine, the eighth amino acid, aspartic acid, has been replaced by glutamic acid, and

the ninth amino acid, cysteine, has been replaced by tyrosine (SEQ ID NO:45, coding SEQ ID NO:61) was found to have bone stimulatory activity.

Page 5 paragraph 5.

A polypeptide in which the third amino acid, asparagine, has been replaced by glutamine, the eighth amino acid, aspartic acid, has been replaced by glutamic acid, and the ninth amino acid, cysteine, has been replaced by serine (SEQ ID NO:46, coding SEQ ID NO:62) was found to have bone stimulatory activity.

Page 5 paragraph 7.

In a particular aspect, for example, polypeptides identified as SEQ ID NOs:24, 25, 26, 27, 39, 40, 41, 42, 43, 44, 45 and 46 (corresponding to sequences lacking terminal modification, SEQ ID NOs:9, 28, 29, 30, 47, 48, 49, 50, 51, 52, 53, and 54, respectively) the charge pattern of the compound consists essentially of that provided by the amino acid sequence corresponding to SEQ ID NO:9, that is, it bears side chain charges in the order of and spaced as the amino acid side chains of SEQ ID NO:9 and does not include other amino acids. The invention includes a compound with substitutions of the sequence corresponding to SEQ ID NO:9 which retain bone stimulatory activity in mammals.